

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|--|----------------|----------------------|---------------------|------------------|--|
| 09/938,256 | 08/23/2001 | Edward S. Beeman | 10003835-1 | 10003835-1 1286 | |
| 75 | 590 01/26/2005 | EXAMINER | | | |
| HEWLETT-PACKARD COMPANY Intellectual Property Administration | | | EDWARDS, PATRICK L | | |
| P.O. Box 272400 | | | ART UNIT | PAPER NUMBER | |
| Fort Collins, CO 80527-2400 | | | 2621 | | |

DATE MAILED: 01/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | |
|---|--|--|---------|--|--|
| | 09/938,256 | BEEMAN ET AL. | \$ | | |
| Office Action Summary | Examiner | Art Unit | | | |
| | Patrick L Edwards | 2621 | | | |
| The MAILING DATE of this communication ap Period for Reply | pears on the cover sheet with the | correspondence ad | dress | | |
| A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a rep - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b). | . 136(a). In no event, however, may a reply be ly within the statutory minimum of thirty (30) d will apply and will expire SIX (6) MONTHS fro e, cause the application to become ABANDON | timely filed ays will be considered timel m the mailing date of this c IED (35 U.S.C. § 133). | | | |
| Status | | | | | |
| 1) Responsive to communication(s) filed on 09-0 | <u>07-2004</u> . | | | | |
| 2a)⊠ This action is FINAL . 2b)□ This action is non-final. | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the | | | | | |
| closed in accordance with the practice under | Ex parte Quayle, 1935 C.D. 11, | 453 O.G. 213. | | | |
| Disposition of Claims | | | | | |
| 4) Claim(s) <u>1 and 3-27</u> is/are pending in the app 4a) Of the above claim(s) is/are withdra | | | | | |
| 5) Claim(s) is/are allowed. | ann nom concluciation. | | | | |
| 6)⊠ Claim(s) <u>1 and 3-27</u> is/are rejected. | | | | | |
| 7) Claim(s) is/are objected to. | | | | | |
| 8) Claim(s) are subject to restriction and/or election requirement. | | | | | |
| Application Papers | | | | | |
| 9) The specification is objected to by the Examin | er. | | • | | |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. | | | | | |
| Applicant may not request that any objection to the | e drawing(s) be held in abeyance. S | see 37 CFR 1.85(a). | | | |
| Replacement drawing sheet(s) including the correct | • | * | , , | | |
| 11)☐ The oath or declaration is objected to by the E | xaminer. Note the attached Office | ce Action or form P | ΓO-152. | | |
| Priority under 35 U.S.C. § 119 | | | | | |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: | n priority under 35 U.S.C. § 119(| (a)-(d) or (f). | | | |
| 1. Certified copies of the priority documen | | | | | |
| 2. Certified copies of the priority documen | | · · · · · · | Chama | | |
| 3. Copies of the certified copies of the price | | ved in this National | Stage | | |
| application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | |
| Coo the attached detailed Office action for a lis | to. The continue copies not recei | | | | |
| Attachment(s) | | | | | |
| 1) Notice of References Cited (PTO-892) | 4) Interview Summa | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 | Paper No(s)/Mail 5) Notice of Informa | | O-152) | | |

U.S. Patent and Trademark Office PTOL-326 (Rev. 1-04)

Paper No(s)/Mail Date _____.

6) Other: ____.

Application/Control Number: 09/938,256

Art Unit: 2621

Page 2

DETAILED ACTION

1. The response received on September 7th 2004, has been placed in the file and was considered by the examiner. An action on the merits follows.

Response to Arguments

2. The applicant's arguments, filed on September 7th 2004, have been fully considered. A response to these arguments is provided below.

Prior Art Rejections

Summary of Argument: In the previous office action, claims 1-20 were rejected under 35 USC § 102(e) as being anticipated by Zhu et al. (USPN 6,345,274). Applicant has amended the claims and traverses the rejection in view of the amended claims. Applicant aptly states on page 8 of the 'remarks' that "Given that each of the remaining original claims has been amended throught this response, applicant respectfully submits that [the prior] rejection is moot as having been applied to the claims in their original form."

Examiner's Response: The examiner agrees that the prior rejection is now moot in view of the amended claims. The examiner, however, does not agree that these claims are in condition for allowance. A prior art rejection to the amended and newly added claims will be provided below.

Claim Rejections - 35 USC § 112

- The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claims 9, 10, 21, 22, and 24-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Newly added claims 21, 24, and 26 are dependent on parent claims 1, 11, and 16, respectively. All of these newly added claims recite 'prompting the user for keywords or phrases during an image storage process.' The independent parent claims, however, make no mention of an 'image storage process'. Thus, this limitation lacks antecedent basis.

The above rejection also applies to amended claim 9, which recites "analyzing images for a recognizable image attribute during an image storing process."

Claims 10, 22, 25, and 27 are rejected for the reasons stated above.

For examination purposes, the phrase 'during an image storing process' will simply be ignored, and the claims will be examined with respect to the rest of the claimed limitations.

Application/Control Number: 09/938,256

Art Unit: 2621

Claim Rejections - 35 USC § 103

Page 3

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Zhu et al. (USPN 6,345,274) (hereinafter 'Zhu') and Kagami et al. (USPN 5,974,422).

With regard to claim 1, Zhu discloses querying a user as to the attributes of an image the user wishes to retrieve (Zhu col. 6 lines 8-9). Since the images are measured and identified based on their features (Zhu col. 5 lines 14-24 and col. 6 lines 15-33), which are determined by image attributes (Zhu col. 5 lines 34-36 and col. 6 lines 36-44 in conjunction with Figure 3). It follows that when a user selects a desired image, the user is inherently identifying the attributes of that image.

Zhu further discloses receiving user responses and presenting images to the user based upon these user responses (Zhu col. 6 lines 10-14). Zhu discloses that the user selects 'desired response images' from the initial query. These selections, (which are received by the system), are the user responses to the query. Furthermore, these selections identify the image attributes that the user wishes to retrieve.

Zhu further discloses presenting images to the user based upon these responses (Zhu col. 6 lines 14-18 and col. 7 lines 30-31 in conjunction with Figure 7). These images are presented to the user via the display 30 disclosed in Zhu.

Zhu fails to expressly disclose querying the user by posing a series of explicit questions to the user, and then receiving explicit user respnses to these questions. As was discussed in the previous office action, the user query disclosed in Zhu consists of implicit questions. Therefore, the Zhu reference alone does not anticipate all the limitations of independent claim 1.

Kagami, however, discloses posing a series of explicit questions to users, and then receiving explicit user responses (Kagami col. 3 lines 1-11). It would have been obvious to one reasonably skilled in the art at the time of the invention to modify Zhu's image retrieval method by using explicit questions as the mechanism of querying a user as taught by Kagami. Such a modification would have allowed for a user friendly method of user/system interaction and would have resulted in a more precise analysis of the user's appraisal of a given image (Kagami col. 3 lines 10-11).

With regard to claim 3, Kagami discloses that the successive questions are dependent on the user response given to a previous question (see kagami col. 9 line 49 – col. 10 line 14).

With regard to claim 4, Zhu discloses eliminating potential image matches in response to the received response (Zhu col. 6 lines 13-21). Zhu discloses retrieving images that are similar to the selected image.

Application/Control Number: 09/938,256 Page 4

Art Unit: 2621

Consequently, the potential matches which are different from the selected image are eliminated. This limitation is further disclosed in Kagami (see Kagami col. 9 line 49 - col. 10 line 14).

With regard to claims 5, 7 and 23 Kagami discloses explicitly selecting a portion of an image presented to the user (Kagami col. 7 lines 24-28: The reference describes that the user selects a portion (i.e. tops or bottoms) of the presented image. It follows that the selected portions qualify as portions of an image, and as images in and of themselve).

With regard to claims 6 and 8, Zhu further discloses that the image features are stored as image metadata (col. 5 lines 14-16). Since the image "features" disclosed in Zhu are determined by the attribute values of the image (see Figure 3 of Zhu), it follows that the attribute values are inherently stored as image metadata. Additionally it should be noted that this occurs in response to the user selection of an image as disclosed in Zhu (i.e. the claimed 'user response to a prompt'). This is shown in col. 6 lines 13-41 in the Zhu reference. Furthermore, these limitations are disclosed in the Kagami specification. Kagami teaches a method for creating and storing 'kansei information', which is analogous to the 'image metadata' recited in the claim.

With regard to claim 9 and 10, Zhu discloses extracting recognizable image attributes from the selected images (Zhu col. 5 lines 14-36 and col. 6 lines 13-31 in conjunction with Figure 3). It was argued above that Zhu inherently determines attribute values in the disclosed feature extraction step. This feature extraction step qualifies as the 'image analysis' recited in the claim in that an image must first be analyzed to determine its features before they can be extracted. Zhu further discloses that this is performed on "recognizable image attributes" such as color, texture, regions, boundaries, etc. (col. 5 lines 18-20).

With regard to claims 21 and 22, Kagami further discloses prompting the user for keywords or phrases relevant to image content, and then storing the keywords as metadata (Kagami col 7 lines 38-58 in conjunction with Figures 7a-b).

Referring to claims 11-15 and 24-25, which merely add a system for performing the method discussed above, the prior art discloses such a system (see Figure 1 of Zhu and Figure 2 of Kagami).

Referring to claims 16-20 and 26-27, which merely add a computer program for performing the method discussed above, Zhu discloses such a computer program (see Zhu col. 4 lines 19-25).

Conclusion

- 7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
 - Kanehara et al. ('A Flexible Image Retrieval Using Explicit Visual Instruction') teaches image retrieval based on user-selected local features.
 - o Knowles (US 2002/0122606 A1) teaches using test questions to archive and retrieve images.

Art Unit: 2621

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action.

Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick L Edwards whose telephone number is (703) 305-6301. The examiner can normally be reached on 8:30am - 5:00pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Boudreau can be reached on (703) 305-4706. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patrick L Edwards

Juhan 1

Art Unit 2621

ANDREW W. JOHNS PRIMARY EXAMINER